

Claims

1. A method for enabling communication between video-enabled and non-video-enabled communication devices, the method comprising:

5 detecting a request to establish video communication between a first device and a second device;

determining that the second device is not capable of displaying video signals;

establishing two-way audio communication between the first and second devices;

establishing one-way video communication with the first device;

10 capturing video signals generated by the first device during the two-way audio communication; and

caching the captured video signals for subsequent display after the two-way audio communication is concluded.

15 2. The method of claim 1, further comprising:

capturing audio signals generated by the first and second devices during the two-way audio communication; and

caching the captured audio signals.

20 3. The method of claim 1, further comprising:

receiving a request from a terminal to transmit the cached video signals;

retrieving the cached video signals from a storage device; and

transmitting the video signals to the terminal.

4. The method of claim 3, wherein the request to transmit the cached video signals comprises a locator link indicating a stored location of the cached video signals.

5 5. The method of claim 4, wherein the locator link comprises a Universal Resource Locator (URL).

6. The method of claim 4, wherein caching comprises:
transmitting the locator link to a user of the non-video-enabled device.

10 7. The method of claim 6, wherein the locator link is transmitted to the user via a messaging system.

15 8. The method of claim 3, wherein the terminal comprises a display screen, the method further comprising:
displaying the video signals on the display screen of the terminal.

20 9. The method of claim 2, further comprising:
receiving a request from a terminal to transmit the cached video and audio signals;
retrieving the cached video and audio signals from a storage device; and
transmitting the video and audio signals to the terminal.

10. The method of claim 9, wherein the terminal comprises a display screen and a speaker, the method further comprising:

displaying the video signals on the display screen of the terminal; and synchronously outputting the audio signals on the speaker of the terminal.

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11. The method of claim 1, wherein caching comprises:
encoding the video signals in a compressed format; and
storing the encoded video signals in a storage device.

12. The method of claim 11, wherein the compressed format comprises a form of predictive coding such as MPEG video compression.

13. The method of claim 11, wherein the storage device is selected from the group consisting of a magnetic storage device, an optical storage device, and a random access memory (RAM).

14. The method of claim 1, wherein the first device comprises a camera for capturing video signals.

20 15. The method of claim 1, wherein the first device is selected from the group
consisting of a video-enabled telephone, a video-enabled cellular telephone, a video-
enabled personal computer, a video-enabled interactive television (ITV) system, and a
video-enabled personal digital assistant (PDA).

16. The method of claim 1, wherein the second device is selected from the group consisting of a non-video-enabled telephone, a non-video-enabled cellular telephone, a non-video-enabled personal computer, a non-video-enabled interactive television (ITV) system, and a non-video-enabled personal digital assistant (PDA).
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17. The method of claim 1, wherein the video signals are cached by a server coupled to the first and second devices by at least one network.

10 18. The method of claim 17, wherein the at least one network comprises a cable television network, a direct satellite broadcast (DBS) network, a wide-area network (WAN), a local-area network (LAN), a telephone network, and the Internet.

15 19. The method of claim 17, wherein the server is located within a broadcast center associated with the at least one network.

20. The method of claim 1, wherein the video signals are cached within the second device.

20 21. A system for enabling communication between video-enabled and non-video-enabled communication devices, the system comprising:

a request detection component configured to detect a request to establish video communication between a first device and a second device;

10 a video-enablement determination component configured to determine that the second device is not capable of displaying video signals;

15 an audio communication component configured to establish two-way audio communication between the first and second devices;

20 5 a video communication component configured to establish one-way video communication with the first device;

25 a video capture component configured to capture video signals generated by the first device during the two-way audio communication; and

30 10 a caching component configured to cache the captured video signals for subsequent display after the two-way audio communication is concluded.

22. The system of claim 21, further comprising:

15 an audio capture component configured to capture audio signals generated by the first and second devices during the two-way audio communication; and

20 15 wherein the caching component is further configured to cache the captured audio signals.

23. The system of claim 21, further comprising:

25 a request reception component configured to receive a request from a terminal to transmit the cached video signals;

30 a transmission component configured to retrieving the cached video signals from a storage device and to transmit the video signals to the terminal.

24. The system of claim 23, wherein the request to transmit the cached video signals comprises a locator link indicating a stored location of the cached video signals.

25. The system of claim 24, wherein the locator link comprises a Universal Resource Locator (URL).

26. The system of claim 24, wherein caching component is further configured to transmit the locator link to a user of the non-video-enabled device.

10 27. The system of claim 26, wherein the locator link is transmitted to the user via a messaging system.

28. The system of claim 23, wherein the terminal comprises a display screen, the system further comprising:

15 a display component configured to display the video signals on the display screen of the terminal.

29. The system of claim 22, further comprising:

20 a request reception component configured to receive a request from a terminal to transmit the cached video and audio signals;

29 a transmission component configured to retrieving the cached video and audio signals from a storage device and to transmit the video and audio signals to the terminal.

30. The system of claim 29, wherein the terminal comprises a display screen and a speaker, the system further comprising:
a display component configured to display the video signals on the display screen of the terminal; and
5 a speaker configured to synchronously output the audio signals.

31. The system of claim 21, wherein the caching component comprises:
an encoder configured to encode the video signals in a compressed format; and
10 a storage device configured to store the encoded video signals.

32. The system of claim 31, wherein the compressed format comprises a form of predictive coding such as MPEG video compression.

15 33. The system of claim 31, wherein the storage device is selected from the group consisting of a magnetic storage device, an optical storage device, and a random access memory (RAM).

20 34. The system of claim 21, wherein the first device comprises a camera for capturing video signals.

35. The system of claim 21, wherein the first device is selected from the group consisting of a video-enabled telephone, a video-enabled cellular telephone, a video-

enabled personal computer, a video-enabled interactive television (ITV) system, and a video-enabled personal digital assistant (PDA).

36. The system of claim 21, wherein the second device is selected from the
5 group consisting of a non-video-enabled telephone, a non-video-enabled cellular telephone, a non-video-enabled personal computer, a non-video-enabled interactive television (ITV) system, and a non-video-enabled personal digital assistant (PDA).

37. The system of claim 21, wherein the video signals are cached by a server
10 coupled to the first and second devices by at least one network.

38. The system of claim 37, wherein the at least one network comprises a cable television network, a direct satellite broadcast (DBS) network, a wide-area network (WAN), a local-area network (LAN), a telephone network, and the Internet.

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39. The system of claim 37, wherein the server is located within a broadcast center associated with the at least one network.

40. The system of claim 21, wherein the video signals are cached within the
20 second device.

41. A computer program product comprising program code for performing a method for enabling communication between video-enabled and non-video-enabled communication devices, the method comprising:

detecting a request to establish video communication between a first device and
5 a second device;
determining that the second device is not capable of displaying video signals;
establishing two-way audio communication between the first and second devices;
establishing one-way video communication with the first device;
capturing video signals generated by the first device during the two-way audio
10 communication; and
caching the captured video signals for subsequent display after the two-way
audio communication is concluded.

42. The computer program product of claim 41, further comprising:

15 capturing audio signals generated by the first and second devices during the two-way audio communication; and
caching the captured audio signals.

43. The computer program product of claim 41, further comprising:

20 receiving a request from a terminal to transmit the cached video signals;
retrieving the cached video signals from a storage device; and
transmitting the video signals to the terminal.

44. The computer program product of claim 43, wherein the request to transmit the cached video signals comprises a locator link indicating a stored location of the cached video signals.

5 45. The computer program product of claim 44, wherein the locator link comprises a Universal Resource Locator (URL).

10 46. The computer program product of claim 44, wherein caching comprises: transmitting the locator link to a user of the non-video-enabled device.

15 47. The computer program product of claim 46, wherein the locator link is transmitted to the user via a messaging system.

48. The computer program product of claim 43, wherein the terminal comprises a display screen, the method further comprising:
15 displaying the video signals on the display screen of the terminal.

49. The computer program product of claim 42, the method further comprising:

20 receiving a request from a terminal to transmit the cached video and audio signals;
retrieving the cached video and audio signals from a storage device; and
transmitting the video and audio signals to the terminal.

50. The computer program product of claim 49, wherein the terminal comprises a display screen and a speaker, the method further comprising:

5 displaying the video signals on the display screen of the terminal; and

synchronously outputting the audio signals on the speaker of the terminal.

51. The computer program product of claim 41, wherein caching comprises:

10 encoding the video signals in a compressed format; and

storing the encoded video signals in a storage device.

52. The computer program product of claim 51, wherein the compressed

format comprises a form of predictive coding such as MPEG video compression.

53. The computer program product of claim 51, wherein the storage device is

15 selected from the group consisting of a magnetic storage device, an optical storage device, and a random access memory (RAM).

54. The computer program product of claim 41, wherein the first device

comprises a camera for capturing video signals.

20 55. The computer program product of claim 41, wherein the first device is

selected from the group consisting of a video-enabled telephone, a video-enabled

cellular telephone, a video-enabled personal computer, a video-enabled interactive television (ITV) system, and a video-enabled personal digital assistant (PDA).

56. The computer program product of claim 41, wherein the second device is
5 selected from the group consisting of a non-video-enabled telephone, a non-video-
enabled cellular telephone, a non-video-enabled personal computer, a non-video-
enabled interactive television (ITV) system, and a non-video-enabled personal digital
assistant (PDA).

10 57. The computer program product of claim 41, wherein the video signals are
cached by a server coupled to the first and second devices by at least one network.

15 58. The computer program product of claim 57, wherein the at least one
network comprises a cable television network, a direct satellite broadcast (DBS)
network, a wide-area network (WAN), a local-area network (LAN), a telephone network,
and the Internet.

59. The computer program product of claim 57, wherein the server is located
within a broadcast center associated with the at least one network.

20 60. The computer program product of claim 41, wherein the video signals are
cached within the second device.

61. A method for enabling communication between an interactive television system and non-video-enabled communication device, the method comprising:

detecting a request to establish video communication between the interactive television system and the non-video-enabled communication device;

5 determining that the non-video-enabled communication device is not capable of displaying video signals;

establishing two-way audio communication between the interactive television system and the non-video-enabled communication device;

10 establishing one-way video communication with the interactive television system;

15 capturing video signals generated by the interactive television system during the two-way audio communication;

capturing audio signals generated by the interactive television system and the non-video-enabled communication device during the two-way audio communication;

caching the captured video and audio signals within a storage device for

20 subsequent display and playback after the two-way audio communication is concluded;

receiving a request from a terminal to transmit the cached video and audio signals;

retrieving the cached video and audio signals from the storage device; and

transmitting the video and audio signals to the terminal for display and playback

20 thereon.

62. A system for enabling communication between an interactive television system and non-video-enabled communication device, the system comprising:

a request detection component configured to detect a request to establish video communication between the interactive television system and the non-video-enabled communication device;

5 a video-enablement determination component configured to determine that the non-video-enabled communication device is not capable of displaying video signals;

an audio communication component configured to establish two-way audio communication between the interactive television system and the non-video-enabled communication device;

10 a video communication component configured to establish one-way video communication with the interactive television system;

a video capture component configured to capture video signals generated by the interactive television system during the two-way audio communication;

15 an audio capture component configured to capture audio signals generated by the interactive television system and the non-video-enabled communication device during the two-way audio communication;

a caching component configured to cache the captured video and audio signals within a storage device for subsequent display and playback after the two-way audio communication is concluded;

20 a request reception component configured to receive a request from a terminal to transmit the cached video and audio signals; and

a transmission component configured to retrieving the cached video and audio signals from the storage device and to transmit the video and audio signals to the terminal for display and playback thereon.

63. A system for enabling communication between video-enabled and non-video-enabled communication devices, the system comprising:

means for detecting a request to establish video communication between a first device and a second device;

5 means for determining that the second device is not capable of displaying video signals;

means for establishing two-way audio communication between the first and second devices;

10 means for establishing one-way video communication with the first device; means for capturing video signals generated by the first device during the two-way audio communication; and

means for caching the captured video signals for subsequent display after the two-way audio communication is concluded.

15 64. A system for enabling communication between an interactive television system and non-video-enabled communication device, the system comprising:

means for detecting a request to establish video communication between the interactive television system and the non-video-enabled communication device;

20 means for determining that the non-video-enabled communication device is not capable of displaying video signals;

means for establishing two-way audio communication between the interactive television system and the non-video-enabled communication device;

means for establishing one-way video communication with the interactive television system;

means for capturing video signals generated by the interactive television system during the two-way audio communication;

5 means for capturing audio signals generated by the interactive television system and the non-video-enabled communication device during the two-way audio communication;

means for caching the captured video and audio signals within a storage device for subsequent display and playback after the two-way audio communication is 10 concluded;

means for receiving a request from a terminal to transmit the cached video and audio signals;

means for retrieving the cached video and audio signals from the storage device;

and

15 means for transmitting the video and audio signals to the terminal for display and playback thereon.